Paper No. 15

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Ex parte SEAN R. WAKAYAMA

Appeal No. 2000-0408
Application No. 08/917,480

ON BRIEF

Before COHEN, STAAB, and NASE, Administrative Patent Judges.
NASE, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal from the examiner's final rejection of claims 1-20, which are all of the claims pending in this application.

We REVERSE and REMAND.

BACKGROUND

The appellant's invention relates generally to aerodynamics and, more particularly, to a reconfiguration control system for

optimizing the spanwise lift distribution on a blended wing-body aircraft by reconfiguring the deflection of trailing edge control surfaces (specification, p. 1). A copy of the claims under appeal is set forth in the appendix to the appellant's brief.

The prior art reference of record relied upon by the examiner in rejecting the appealed claims is:

Ashkenas	2,549,045	April 17, 1951

Claims 1-20 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Ashkenas.

Rather than reiterate the conflicting viewpoints advanced by the examiner and the appellant regarding the above-noted rejection, we make reference to the final rejection (Paper No. 6, mailed February 1, 1999) and the answer (Paper No. 14, mailed August 24, 1999) for the examiner's complete reasoning in support of the rejection, and to the brief (Paper No. 12, filed May 28, 1999) for the appellant's arguments thereagainst.

OPINION

In reaching our decision in this appeal, we have given careful consideration to the appellant's specification and claims, to the applied prior art reference, and to the respective positions articulated by the appellant and the examiner. As a consequence of our review, we make the determinations which follow.

To anticipate a claim, a prior art reference must disclose every limitation of the claimed invention, either explicitly or inherently. In re Schreiber, 128 F.3d 1473, 1477, 44 USPQ2d 1429, 1431 (Fed. Cir. 1997). As stated in In re Oelrich, 666 F.2d 578, 581, 212 USPQ 323, 326 (CCPA 1981) (quoting Hansgirg v. Kemmer, 102 F.2d 212, 214, 40 USPQ 665, 667 (CCPA 1939)) (internal citations omitted):

> Inherency, however, may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient. If, however, the disclosure is sufficient to show that the natural result flowing from the operation as taught would result in the performance of the questioned function, it seems to be well settled that the disclosure should be regarded as sufficient.

Thus, a prior art reference may anticipate when the claim limitation or limitations not expressly found in that reference

are nonetheless inherent in it. See In re Oelrich, 666 F.2d at 581, 212 USPQ at 326; Verdegaal Bros., Inc. v. Union Oil Co., 814 F.2d 628, 630, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). Under the principles of inherency, if the prior art necessarily functions in accordance with, or includes, the claimed limitations, it anticipates. See In re King, 801 F.2d 1324, 1326, 231 USPQ 136, 138 (Fed. Cir. 1986). However, inherency is not necessarily coterminous with the knowledge of those of ordinary skill in the art. See Mehl/Biophile Int'l Corp. v. Milgraum, 192 F.3d 1362, 1365, 52 USPQ2d 1303, 1305-06 (Fed. Cir. 1999); Atlas Powder Co. v. Ireco Inc., 190 F.3d 1342, 1347, 51 USPQ2d 1943, 1946-47 (Fed. Cir. 1999).

With this as background, we analyze the single prior art reference applied by the examiner in the rejection of the claims on appeal.

Ashkenas' invention relates to anti-stall slots for airplanes, and more particularly, to a means and method for controlling tip stall in airplanes having swept-back wing panels. One wing panel W of an all-wing army bomber is shown in Figure 1.

The wing panel includes elevons 4, rudders 5 for producing unilateral drag at the wing tips and landing flaps 6.

We agree with the appellant (see Brief, pp. 6-8) that the subject matter of claims 1-20 is not anticipated by Ashkenas. In that regard, Ashkenas does not disclose every limitation of the claimed invention, either explicitly or inherently. Specifically, Ashkenas does not disclose the "control surface reconfiguration system" as recited in claims 1-10, the "reconfiguration means" as recited in claims 11-18, or the "reconfiguring" step as recited in claims 19 and 20 since Ashkenas does not specifically teach or disclose that his control surfaces (i.e., the elevons 4, the rudders 5 and the landing flaps 6) are selectively reconfigurable to a plurality of predetermined positions as required to optimize the spanwise force distribution across the wing for each of a plurality of different flight configurations. The examiner's reliance (see Answer, pp. 3-4) on the basic elements of flight and/or the knowledge of one skilled in the art is misplaced in this instance since the rejection is under 35 U.S.C. § 102, not under 35 U.S.C. § 103.

Since all the limitations of claims 1-20 are not disclosed by Ashkenas for the reasons set forth above, the decision of the examiner to reject claims 1-20 under 35 U.S.C. § 102(b) is reversed.

REMAND

We remand this application to the examiner to consider the patentability of claims 1-20 under 35 U.S.C. § 103 over the cited prior art. In addition, the examiner should consider searching for other prior art[1] that would teach how the control surfaces along a wing's trailing edge should be set for different flight conditions (e.g., take-off, landing, cruising, pitching).

[1] The examiner may wish to consider computer-based flight management systems, aircraft operating manuals, and pilot operating handbooks.

CONCLUSION

To summarize, the decision of the examiner to reject claims 1-20 under 35 U.S.C. § 102(b) is reversed. In addition, this application has been remanded to the examiner for further consideration.

REVERSED; REMANDED

IRWIN CHARLES COHEN)
Administrative Patent Judge)
)
)
)
LAWRENCE J. STAAB) BOARD OF PATENT
Administrative Patent Judge) APPEALS
) AND
) INTERFERENCES
)
)
)
JEFFREY V. NASE)
Administrative Patent Judge)

ROBERT A. WESTERLUND & POWELL, P.C.
122 N. ALFRED STREET
ALEXANDRIA, VA 22314-3011

JVN/dl